

CLAIMS

1. (Previously Presented) An apparatus for generating an angular sweep of a directed propagation of electromagnetic radiation, comprising:
 - a first reflector adapted to move over a first angular range of movement; and
 - a first and a second fixed reflector to reflect the directed propagation of electromagnetic radiation incident upon and reflected by the first reflector onto the fixed reflectors and back to the first reflector;
 - the first fixed reflector is contiguous with the second fixed reflector and the first fixed reflector is angled with respect to the second fixed reflector;
 - wherein the first angular range of movement of the first reflector creates an increasing sweep of the directed propagation of electromagnetic radiation with each reflection from the first reflector.
2. (cancelled)
3. (cancelled)
4. (Previously Presented) The apparatus of claim 1, wherein the directed propagation of electromagnetic radiation is selected from the group consisting of a laser beam, microwave energy, visible light, non-visible light, infra-red radiation, radar waves, radio waves and combinations thereof.
5. (Previously Presented) The apparatus of claim 1, the first reflector and the at least two fixed reflectors are mirrors.
6. (original) The apparatus of claim 5, wherein the mirrors are planar.
7. (original) The apparatus of claim 1, wherein a means for oscillation drives the movement of the first reflector.
8. (original) The apparatus of claim 1, wherein the movement of the first reflector is adapted to have a variable amplitude.
9. (original) The apparatus of claim 1, wherein the movement of the first reflector is adapted to have a variable frequency.

10. (original) The apparatus of claim 1, wherein the movement of the first reflector is adapted to have a variable frequency and a variable amplitude.

11. (Previously Presented) The apparatus of claim 1, wherein the distance between the first reflector and at least one of the fixed reflectors is adjustable.

12. (cancelled)

13. (cancelled)

14. (Previously Presented) A method for sweeping a directed propagation of electromagnetic radiation, comprising:

directing the propagation of electromagnetic radiation having a defined angle of incidence onto and off of a first reflector, then onto and off of at least one fixed reflector and back onto and off of the first reflector;

periodically oscillating the first reflector with a defined frequency;

wherein at least some of the electromagnetic radiation is reflected onto and off of a first fixed reflector and at least some of the electromagnetic radiation is reflected onto and off of a second fixed reflector.

15. (Previously Presented) The method of claim 14, further including the step of varying an amplitude of moving the first reflector.

16. (original) The method of claim 14, further including the step of varying a frequency of moving the first reflector.

17. (original) The method of claim 14, wherein the directed propagation of electromagnetic radiation is initially directed through the reflective path while the first reflector is static.

18. (cancelled)

19. (Previously Presented) An apparatus for generating an angular sweep of a directed propagation of electromagnetic radiation, comprising:

a first reflector adapted to oscillate; and

at least two secondary reflectors;

the first reflector and secondary reflectors disposed to create a reflective path onto and off of the first reflector at least twice;

wherein a distance between the first and at least one of the secondary reflectors is adjustable.

20. (cancelled)

21. (original) The apparatus of claim 19 wherein at least one of the secondary reflectors is adapted to oscillate.

22. (Previously Presented) The apparatus of claim 1 wherein the directed propagation of electromagnetic radiation is visible electromagnetic radiation, non-visible electromagnetic radiation, or combinations thereof.

23. (Previously Presented) The apparatus of claim 11 wherein at least one reflector is slidable along a track.

24. (Previously Presented) The method of claim 14, further comprising the step of illuminating a machine-readable symbology with the directed propagation of electromagnetic radiation.

25. (Previously Presented) The method of claim 14, wherein at least one of the fixed reflectors is adjustable and further including the step of sliding the adjustable fixed reflector along a track to adjust the distance between the first reflector and the adjustable fixed reflector.

26. (Previously Presented) The apparatus of claim 19 further comprising a track, wherein the at least one secondary reflector is slidable along the track to adjust the distance.

27. (Previously Presented) The apparatus of claim 21 wherein the at least one of the secondary reflectors is adapted to oscillate at a lower amplitude than the first reflector.

28. (Withdrawn) An apparatus for generating an angular sweep of a directed propagation of electromagnetic radiation, comprising:

a first reflector adapted to move over a first angular range of movement; and

a non-planar fixed reflector to reflect the directed propagation of electromagnetic radiation incident upon and reflected by the first reflector onto the fixed reflector and back to the first reflector;

wherein the first angular range of movement of the first reflector creates an increasing sweep of the directed propagation of electromagnetic radiation with each reflection from the first reflector; and

the non-planar fixed reflector comprises a first planar surface and a second planar surface, said first planar surface angled with respect to the second planar surface.

29. (Withdrawn) The apparatus of claim 28 wherein the directed propagation of electromagnetic radiation is visible electromagnetic radiation, non-visible electromagnetic radiation, or combinations thereof.

30. (Withdrawn) The apparatus of claim 28, wherein the directed propagation of electromagnetic radiation is selected from the group consisting of a laser beam, microwave energy, visible light, non-visible light, infra-red radiation, radar waves, radio waves and combinations thereof.

31. (Withdrawn) The apparatus of claim 28, the first reflector and the fixed reflector are mirrors.

32. (Withdrawn) The apparatus of claim 28, wherein a means for oscillation drives the movement of the first reflector.

33. (Withdrawn) The apparatus of claim 28, wherein the movement of the first reflector is adapted to have a variable amplitude.

34. (Withdrawn) The apparatus of claim 28, wherein the movement of the first reflector is adapted to have a variable frequency.

35. (Withdrawn) The apparatus of claim 28, wherein the movement of the first reflector is adapted to have a variable frequency and a variable amplitude.

36. (Withdrawn) The apparatus of claim 28, wherein the distance between the first reflector and the fixed reflector is adjustable.

37. (Withdrawn) The apparatus of claim 36 further comprising a track, wherein at least one reflector is slidable along the track to adjust the distance.

38. (Withdrawn) An apparatus for generating an angular sweep of a directed propagation of electromagnetic radiation comprising:

- a first reflector adapted to move over a first angular range of movement,
- a first and second fixed reflector to reflect the directed propagation of electromagnetic radiation incident upon and reflected by the first reflector onto the fixed reflectors and back to the first reflector; and
- the first fixed reflector is in contact with the second fixed reflector.

39. (Withdrawn) An apparatus for generating an angular sweep of a directed propagation of electromagnetic radiation, comprising:

- a first reflector adapted to move over a first angular range of movement; and
- at least one curved reflector to reflect the directed propagation of electromagnetic radiation incident upon and reflected by the first reflector onto at least one curved reflector and back to the first reflector;
- said at least one curved reflector is arranged on a side of the directed propagation of electromagnetic radiation incident on the first reflector;
- wherein the first angular range of movement of the first reflector creates an increasing sweep of the directed propagation of electromagnetic radiation with each reflection from the first reflector.

40. (Withdrawn) The apparatus of claim 39 wherein the directed propagation of electromagnetic radiation is visible electromagnetic radiation, non-visible electromagnetic radiation, or combinations thereof.

41. (Withdrawn) The apparatus of claim 39, wherein the directed propagation of electromagnetic radiation is selected from the group consisting of a laser beam, microwave energy, visible light, non-visible light, infra-red radiation, radar waves, radio waves and combinations thereof.

42. (Withdrawn) The apparatus of claim 39, the first reflector and the fixed reflector are mirrors.

43. (Withdrawn) The apparatus of claim 39, wherein a means for oscillation drives the movement of the first reflector.

44. (Withdrawn) The apparatus of claim 39, wherein the movement of the first reflector is adapted to have a variable amplitude.

45. (Withdrawn) The apparatus of claim 39, wherein the movement of the first reflector is adapted to have a variable amplitude.
46. (Withdrawn) The apparatus of claim 39, wherein the movement of the first reflector is adapted to have a variable frequency.
47. (Withdrawn) The apparatus of claim 39, wherein the movement of the first reflector is adapted to have a variable frequency and a variable amplitude.
48. (Withdrawn) The apparatus of claim 39, wherein the distance between the first reflector and the fixed reflector is adjustable.
49. (Withdrawn) The apparatus of claim 47 further comprising a track, wherein at least one reflector is slidable along the track to adjust the distance.